

Understanding Water Scarcity in the Socio-Cultural Context in Thar Desert of Pakistan

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Abstract

Water is the most important element of human life. It is a necessity which is not just an essential means of survival but it is also socially and culturally important in many regions. Scarcity of water is the challenge which is faced globally these days and more rigorously by the inhabitants of less urbanized settings. Climate changes, environmental changes and human way of living are the few factors disrupting the natural balance and causing shortage of resources, most importantly water. This paper seeks to develop an understanding of the relationship that people of Thar desert have with their environment and resources, specifically water, and the way in which anomalies like resource scarcity affect the social and cultural aspects of people's lives. This research builds on the argument that water is not just a necessity without which people would die in Thar, rather it is ingrained in every aspect of their lives; from their daily routines to culture and religion as well. The findings of this study develop an understanding of profound impacts that the scarcity of water has upon on the society and provides a basis for government organizations and NGOs for taking necessary measures to lessen the water scarcity in the area.

1. Introduction

Water is essential for survival and sustenance of life on this planet. Life giving properties that water possesses, give it a special and significant place in human life. From hunter-gatherers to early settled human civilizations and modern societies, water has remained the key element in nurturing human life. However, this dependence on water adversely affects human civilizations in case of its unavailability or shortage. Inadequate water supply and limited access to drinking water resources is an issue faced at the global level and is undoubtedly a major threat and challenge for us. The literature and debate surrounding this issue mainly focuses upon the water management, conservation and sustainable supply (Kakonge 2012; Gober, 2010). The studies that analyze the impacts of water scarcity on the population, focus on the economic aspects, food security issues and the conflicts that arise due to this problem (Haddadin, 2009; Harrington et al., 2008). However, the effects of water scarcity on the social life of population has been largely ignored in these academic studies. This research tries to shed light upon an important fact that resource scarcity affects the socio-cultural life of local people in various ways.

The research work done in desert settings, like Rajasthan desert, concerns mainly ecology and environmental studies, such as, Sinha's (1996) work about desertification control in Rajasthan and its potential for developing into a rangeland. David Mosse's (2003) work is very thorough regarding the way in which social and political organisation is influenced by the ecology of water flows in South India but the context of study is very diverse as compared to Pakistan's desert. The focus of his study is the harvesting system in Tamil Nadu. He analyses the irrigation system (tank irrigation) in relation to the politics of power and social organization in the region. This makes the scope of study very diverse as it caters to historical, social and ecological point of view. Due to the focus on power relations Mosse's research mostly concerns the social organization from the male perspective in the society, thus ignoring the gender implications in relation to the water issue. On the contrary, this paper mainly highlights the centrality of gender aspect in social and domestic life in relation to water issue in Thar.

Water has an increased importance in a desert setting is a well-established fact and different researches have been conducted regarding the lifestyle component in relation to water insecurity in different societies (Thesiger, 2007). Historical and ethnographic accounts demonstrate diversity in water regulation and use across cultures (Reisner, 1993; Little and Leslie, 1999). These studies focus on different aspects of water insecurity in the society as separate phenomena such as, regulation of different water channels

and social distribution of water. However, this research tries to understand water and its lack from a holistic viewpoint. It is argued in this paper that water is not just important for the people of Thar from survival point of view rather it has variety of meanings in local context and scarcity is ingrained in the socio-cultural lives. Keeping in mind the dependence of human society on water in many ways, this work intends to understand the ways in which lack of water impacts the socio-cultural processes in the Thar region. This fieldwork depicts the issue of water scarcity and its implications in the communities of Thar thus, attempting to lessen the knowledge gap in existing literature regarding the relationship of lack of water with the social context.

The Tharparkar desert in Pakistan is a region that has been facing the shortage of water since many years. This desert distinguishes itself amongst deserts of the world by its high population of humans and livestock. Another aspect that sets it apart from other deserts is that it has no river or canal to supply freshwater; in contrast to Sahara desert that has Nile river or Rio-Grande river in Chihuahuan desert in North-America. The recent large scale deaths caused by famines and diseases as well as the popular argument surrounding relief work (aid transforming local hardworking population into beggars) in the region calls for an understanding of the local context beyond the surface issues.

Water is a scarce resource in Thar and drinking water sources are extremely important for the survival of people and livestock in this region (Shaikh, 2003). It is a resource considered very precious by the people and its availability and unavailability affects the society and culture in profound ways. This research paper argues that water is not just required by people to survive in Thar rather it is a source of income, prosperity, joy, suffering, food, and fodder (for the animals). More precisely, I found that scarcity is a part of everyday reality in Thar and it is articulated in the social setting (relationships, organization, and events), living patterns, economy and culture (folktales, folksongs, festivals) of the communities, with women being the primary players in water collection and management.

This article is based on the research work conducted in 2013, in Mithi district of Tharparkar region in Pakistan. Social significance of water and its shortage is investigated along two lines of inquiry. First, by adopting the view that water is endowed with several meanings and specific significance in the societies (Stokowski, 2008), I consider how water has a special role in social and cultural constructions in Thar. Second, I examine the influence that water scarcity has upon these social and cultural constructions. These two lines of analysis reveal the relationship of people with their environment and the pervasive role that water scarcity plays in the lives of the people in Thar Desert.

This understanding of water scarcity as an all-encompassing element can enable the local and international organizations working in Thar to meet local needs more easily and find more adequate solutions addressing social, economic, technological and public health problems related to water issue. Over decades, Thar dwellers have learnt to live with the constraints of water availability which has enabled them to develop local water management skills. Any attempt to control the issue of water in Thar will have to be developed in accordance to the traditional system, which requires an understanding of the society in relation to water. The significance and reverence of water prevalent among the local people may also lead to the emergence of new perspectives to conceptualize water and its management.

In order to elucidate the context, the relevant literature regarding the relationship between resources, like water, and human societies and the impact of resource scarcity on a society and culture will be discussed in detail. Section 3 will outline the research methods used in this study. Section 4 will present the socio-economic condition of the villages where the research has been conducted. Next two sections will focus on the issue of availability of water in the villages, sources of water used by the people and the impact of this situation on the society and culture of the area. Finally, section 7 will be about the analysis, conclusion and recommendations.

2. Water in Socio-Cultural Context

The relationship between water, society and culture is very strong as well as complex in its own terms. Mosse (2010) in his influential work regarding water in India, emphasizes that water resources are not just simply present in a society rather they are “produced, used, and given meaning by shifting social and political relationships” (p.3). It is the culture which defines significance of water in specific contexts; “why, how, and when water is important to people is culturally specific” (Oestigaard, 2005, 8). Cultural differences hugely impact the way in which water is perceived, valued and managed in different societies. For instance, in some cultures wasting water is considered sinful while in others there are no such prohibitions. Similarly, every type of water is not considered as being equally important or relevant in a society, for example, if there is only one main source of water in a society, such as the Nile in Egypt, it will gain a different meaning and importance as compared to the places where there are multiple water-bodies available (Oestigaard, 2009).

The absence or presence of water is very important to understand its cultural value because “the relation between absence and presence of water give rise to cultural and religious constructions” (Oestigaard, 2005, 95). Availability of water plays a crucial role

in structuring a particular society. People's perception of water and the ways in which a culture values it must be seen in reference to the absence or presence of different types of water in different times in a year, because water is very important for humans at personal and societal level (Oestigaard, 2009). This structuring role of water even increases in cases when water is available in limited amounts. In water scarce regions, like deserts, there is more socio-economic reliance on water and its scarcity gives significant cultural value to water as well. "The control of water in desert water-worlds has a structuring function in all spheres of social and religious life" (Oestigaard, 2005, 93). Birthplace of Islamic religion is a desert setting and therefore, Muslim Holy Scripture is full of the images of a desert life. Without taking into account the background and the setting in which Islam emerged, it becomes very difficult to understand the significance of water in it and many of the water rituals it emphasizes.

It also has a very important role in structuring and social organization in some societies:

From the organization of the women's queue at the water well early in the morning to the distribution of a certain quantity of water among households and clans which they may use for irrigation or husbandry, the scarcity of water is hierarchically structured where some receive more water than others. (Oestigaard, 2009, 20)

Water is interlinked to many aspects of the social life and institutions. Subsistence, livelihood and economy depend upon water in many societies. Water related activities and practices create common experiences for people of a village or a clan and helps in sharing of the ideas. Religion, which is the central part of a culture and society, has certain beliefs regarding water. Water rituals in many religions also help in organizing society at a different level. This discussion regarding water's role in a society shows that water has been, and still is, a crucial agency in formation and organization of a society at many different levels and in various different ways.

3. Water in Sindh, Pakistan

Sindh region has been suffering from shortage of water since many years. The unequal distribution of water among provinces has always been a point of conflict in Pakistan. Apart from this shortage of water, Sindh also consists of one of the largest deserts of the world; Tharparkar. Since, a desert is a place that naturally lacks water, the situation even worsens in the case of Tharparkar.

In-depth study has been carried out in the villages named Nihaal Shah and Memon Talhi in Thar desert, where water scarcity has been a problem since a long time. In order to understand the people of Thar and the significance of water in their lives, it must be kept in mind that lives and identities of these people are strongly connected to the environment and their religious and cultural practices are definitely impacted by the nature (Gagné, 2013). According to Karin Gagné (2013), religious and cultural practices of people in the Indian part of Thar Desert clearly reflect the significance of the local ecosystem.

Despite this significance of water in human life, effects of shortage of this life giving force upon people in Thar Desert remain largely unexplored. Given the strong relationship of water with human society and culture, it becomes important to explore the effects of water scarcity on the social lives of people and their own unique ways of dealing with the situation.

4. Research Methodology

The Thar Desert, which is also called the Great Indian Desert, is an arid region located partly in India, and partly in Punjab and Sindh provinces of Pakistan. Major part of the desert lies in India; in states of Rajasthan, Haryana, and Gujrat. In Pakistan, the desert includes Thar and Parkar regions and this district is spread over 19,638 square kilometers (Shaikh, 2003). Thar is derived from the term *t'hul*, the general term which is used for sand hills of the area. The desert has a changing earth surface, with high and low sand dunes separated by sandy plains ("Thar Desert", n.d.). It is a homeland for almost one million Hindus and Muslims, who share their lives and culture in the area (Shaikh, 2003).

The climate of Thar is very dry with very less rainfall which causes droughts to be very common in the area. "The rainfall in Tharparkar mostly occurs in monsoon season between June and September and varies between 50 to 300 mm" (Shaikh, 2003, 65). Rain plays very central role in the lives of people of Thar and rain water deposited in ponds is used for drinking, washing, cooking and other purposes. These temporary and permanent sources of water have ensured the sustenance of life in the desert since many years. People of Thar are also dependent upon groundwater, as a source of drinking water, but most of the water underground is saline. Safe and drinkable underground water is very rarely found in Thar as it usually lies at great depths. Distribution of this water is also uneven; most of the wells in different villages contain saline water, not suitable for drinking.

The research was conducted in two small villages, known as Nihaal Shah and Memon Talhi in Tharparkar district, Sindh province, Pakistan. Administratively, Tharparkar district is divided into four tehsils:¹ Mithi, Diplo, Chachro, and Nagarparkar



Figure 1. Map of Tharparkar District

Source: UN Office for the Coordination of Humanitarian Affairs

(Shaikh, 2003), as shown in figure 1. It consists of almost two thousand small villages. Nihaal Shah is a small village located at a distance of approximately thirty to fifty kilometers from the main cities of the area and Memon Talhi is situated at a distance of approximately five kilometers from Nihaal Shah. These particular villages were chosen on the basis of severity of the water issue and the remoteness of the villages and surrounding areas.

The qualitative approaches that are used in this research are phenomenological study and ethnographic research. This particular research topic requires phenomenological approach because of the need to understand the impacts on cultural and social lives of people due to the phenomenon of water scarcity. However, it is also ethnographic in nature as almost every aspect of lives of the villagers is related to water in one way or another.

The data of this study was obtained through interviews, observation and focus group discussions during the period of November-December 2013. In-depth interviews were conducted with the residents of both villages; in the village and the nearby areas where villagers used to gather to collect water. Interviews and informal discussions were also carried out with the people of the nearby villages and friends of the village head (in case of Nihaal Shah), who visited the village a few times. Information from the secondary data sources were also used as per requirement.

5. Socio-economic Conditions of the Villages

Nihaal Shah is a small village, surrounded by sand dunes and desert shrubs. It has a population of approximately a hundred people. There are total seventeen households in the village. Major portion of population is comprised of women and children; male adults constitute thirty percent of the population. All the village residents are Muslims and they belong to *Syed*² caste. On the contrary, Memon Talhi is relatively larger village, with one hundred forty households, of which hundred belong to Muslims and rest of the forty are of *kohli*³ people.

In terms of livelihood, farming, animal husbandry and labor work are the main occupations in both villages. Although farming is essential for providing food for the people and fodder for animals, it alone is not sufficient to fulfill the needs. Thus, in order to sustain life, people have to rely on other side jobs like working as drivers or transporters; they carry raw material, such as wood and other marketable goods to the city and get paid for their services. Some people, especially *memons*⁴ of Memon Talhi, also have their small shops in the city. Most of the *kohlis* of Memon Talhi work on wages in different areas. Animal husbandry is another source of livelihood in the area therefore, livestock is considered to be very important by the people. Cow, sheep, goats, ox, donkey, and camel form the major cattle population in the area.

The economic class divisions are not very defined in Nihaal Shah or Memon Talhi. The income levels do not show any stark differences and people lead a simple life overall. Usually a person having political influence in the area or in possession of large

area of cultivable land (in comparison to the other village residents) has a higher status in the village. Being a member of *Syed* family also gives higher status to a person and he/she is respected by other castes. Since, all the residents of Nihaal Shah belong to *Syed* caste; they are respected by people of the nearby villages as well as, the followers of the saint Baja Din Aulia.⁵

In terms of infrastructure, the basic health and education facilities are not available in the villages. There is only one primary school in each village and no medical facility exists in any of the villages. The nearest medical facility is approximately ten-fifteen miles away. Electricity network also does not exist in the area and people use battery units to charge cell phones. Clean water facility is unavailable and people rely on distant sources to access water. As far as the road networks are concerned, there is no direct connectivity of the village with the main highway (Naukot-Umerkot). In case of Memon Talhi, there is a patch of road, half a kilometer in length, connecting the village to the main road, but the rest of the village has no constructed roads or pavements. High schools, health facilities, public transportation, and market places are available only in the cities of the district.

6. Availability of Water

There is no permanent source of fresh water for drinking in any of the villages under discussion. The nearest fresh water source is outside the village at a distance of almost two miles. Water is needed for every activity; from drinking to cooking, bathing, washing and for livestock and agriculture as well. People have to fetch water from the distant sources many times a day in order to fulfill their needs. During the hot months of summer, getting water from those sources gets even difficult for the people of the area because of the severity of weather.

There are two wells in the Nihaal Shah and five in Memon Talhi (known as *khoo* in native language) but none of them contain drinkable water. Most of the water under the sands of Thar is saline and even blackish in color and thus cannot be used for drinking by humans or animals. Due to this reason, water of these wells is of no use to the villagers. Farida, a forty years old woman from Memon Talhi, while explaining about the issue of water, said, *paani ki bari lachari hai* (water is a huge problem for us). This phrase of hers shows that people consider themselves helpless when it comes to the issue of water scarcity in the village.

Even the water that is available to the people is not good in terms of quality. Water is not pure and clean and it contains mud, giving it the muddy color. Apart from the common diseases caused by this water, the high levels of toxic elements present in the underground water of Thar region also lead to teeth decay, skin diseases and, kidney and liver diseases in the long run. It is a difficult task to find clean water that tastes good. Terms *kharoo paani* and *meetho paani* are used by the natives, which denote saline water and sweet water respectively.

6.1 Sources of Water

There are a few sources which provide drinkable water to the villagers and the main ones are: rain, ponds, and lakes and in few cases, a nearby hand-pump or tube-well.



Figure 2. *Tankaas* built in an open space outside a house

Source: Author's own photograph

6.1.1 Tanka

As mentioned earlier, there is no drinking water source in both of the villages, therefore, people have made underground storage tanks, known as *tankaas* by the natives. A *tanka*⁶ is a cement tank made underground which is used as a reservoir for storing rain water. This technique is developed by the local people for keeping drinkable water stored in their houses, so that it could be used anytime. Water that people get from other sources on daily basis is also stored in these tanks. Figure 2 shows two *tankaas* built in an open space in the village. Tanks are usually built in the courtyards of the houses or outside the houses; in the open spaces nearby. Each house owns three to six of these tanks depending upon the economic conditions of the household, since building a tank is costly.

6.1.2 Dhora

The villagers also get water from a tube-well installed at a place known as Dhora, which is at a distance of approximately four miles from the villages. The water present in this area (underground) is sweet and drinkable. Not just residents of Nihaal Shah and Memon Talhi, but the people from many nearby villages come to this place for getting water. The tube-well was installed at this place by the local landlord of a nearby village, named Goth⁷ Inam Ullah, 6-7 years ago.

Dhora is a word of Sindhi language and it means deep place. The underground water in this area is sweet because a river used to flow here, according to the respondent Rehman Ullah. Now this river has no presence in the area but remnants of a canal like deeply dug space can be seen at some spots there and the rain water gets stored in it for some period of time (for two to three months).

Two hand-pumps are installed in this area as well, which are around forty feet deep. Tube-well and hand-pumps tap seepage water from the earth. Water only remains in *nalkaas* (hand-pumps) during rainfalls and two to three months following it. After that, the water surface goes down and people have to switch to some other source for getting drinkable water. "We go to Dhora for getting drinking water as it is the closest source of clean water from our *goth*. When there is no water available there, we have to get water from the city or *tarai*", said Naseem Bibi.

6.1.3 Tarai

Tarai is another source of water used by the desert people, though not a very preferable one. When rain water is gathered naturally in some shallow pond like place in the desert then it is called *tarai*. Water can stay in a *tarai* for many months. Water from a *tarai* is very rarely used for drinking purposes because it is exposed to environmental pollution and gets contaminated very quickly. For this reason, women usually wash their cloths at such water sources and animals drink water from them. If rainfall occurs on seasonal basis then water in a *tarai* remains clean as it keeps on getting refreshed. But this rarely happens in the area therefore, once the monsoon ends, these rain fed lakes dry up very soon. These temporary sources of water have ensured the survival of local people of Thar since many decades. However, with increasing climate changes, unpredictability of weather in recent years (recurrent floods and droughts) and population growth, the strain upon these resources has increased even more.

7. Lack of Water and its Social Implications

Despite being available in less quantity, water is a very valued resource for communities of Thar in general and researched villages in particular. Water is incorporated in social lives of these people in a way that their world and daily routine circulate around it. Water is important for every individual and community, but in those communities where it is scarcely available, it becomes even more important for the people. "The less water that exists, the more dependent you become on the reliable and safe water sources" (Oestigaard, 2005, 93). Therefore, water has a significant role in social sphere of life in a desert environment.

7.1 Life Style and Management of Water

Water is that element of these people's routine which decides about the course of their lives. The life patterns and daily routines of the people are shaped according to the availability and non-availability of water. From cooking food to taking bath, each task is done in accordance to water availability. The very first task of the day is to give water to the animals. Women get water from underground water tanks with the help of rope and tin cans and then they put this water in steel or mud pots in front of animals. Later, a male member of the house takes the flock out for grazing and then to some nearby *tarai* where animals bathe and drink water.

Women of Memon Talhi, especially Hindu women, leave their houses early in the morning to get water. They have to go on foot usually since most of the houses don't own donkeys to carry water for them. Each woman carries two *matkas* (pots) or plastic cans for bringing water. These women have to fetch water twice or thrice a day depending upon the usage. It is only after getting

back that they start doing their house chores. Aasia, a young girl from the village, while sharing her routine mentioned that she leaves before dawn in order to fetch drinking water and leaves for work after getting back. In the afternoon, they again have to leave their homes in order to get water. When asked about the importance and usage of water, Naseem Bibi said, “what should I tell you about the importance of water, it is used in everything we do, drinking, cooking food, for animals; there is no way without it”.

Usually young women of the house go for fetching water and older ones stay home to take care of children. They have to get enough water for their needs before nightfall, as it becomes dangerous to go out during night because of deadly reptiles and darkness. When water is taken from hand-pumps at Dhora, each woman fills pots at her own turn because women from other villages also gather there to get water. This activity of fetching water is also a kind of social get-together where women from different villages meet and chat with each other. Different matters are discussed and problems are shared, as well as news from one village to another also travels in this way. Getting water from a distant source on foot is a difficult task for women as they have to walk all the way back to their village carrying filled pots of water on their heads.

On the contrary, *Syed* women of Nihaal Shah do not go out of the village to get water. They strictly follow *pardah*⁸ and don't leave the premises of their village without male members. *Syed* family has helpers who bring water for them. These helpers usually belong to families which are among the *mureeds*⁹ of the *Syed* family. They do not work anywhere else and working for *Syed* family is a way of showing devotion to the *pir*¹⁰ (Baja Din Aulia) and his descendants. Helpers are responsible for doing small chores and almost every house in the village has one helper. They bring water, twice a day, on donkeys from Dhora for Mohammad Shah¹¹ and other different houses of the village.

This dependence on water and its insufficiency also cause villagers to adopt nomadic life. People of both villages take good care of their animals. Livestock is a source of livelihood and sustenance, their food and drinking needs are taken care of and this makes life even difficult. With less amount of water available for themselves, people have to provide it to their animals as well. This often compels them to adopt the nomadic lifestyle. Villagers often have to move to other places in severe droughts and scarce water conditions, along with their animals, in search of water and food. They travel from one place to another until the rainy season arrives and then return to their home during rainfalls. In such a situation, one or two males of the family (extended) gather the flock and leave in search of water and food, while the rest of family stays back at home. Often many animals die during this journey due to lack of food and unavailability of water.

Management of scarce amount of water is another important concern in the daily lives of the villagers. Water is used with great care and children are not allowed to waste it. Managing water in the house is responsibility of the women. Fetching and using water for cooking, bathing, washing and providing to the animals, all tasks are done as well as managed by the women. “I do not let my children waste water. I give them very limited amount of water when they take bath or go to toilet”, said Samina Bibi. Only a few village houses have *pakka* (constructed with sewerage system) toilets, rest have *katchay* (unconstructed) toilets. Water is kept in a mud pot in the toilets and is used from there. Villagers cannot take bath on daily basis; they take bath when water is available in plenty. People usually take bath after two to three days and during extreme scarcity this duration extends to weeks. Women try to waste minimum amount of water on washing clothes and utensils. Since, *Syed* women don't leave their village without a male member, they wash clothes at home with stored water. However, women from Memon Talhi often go to a nearby *tarai* for washing clothes and utensils, when convenient. “Sometimes when I can spare some time, I walk all the way to dhora to wash utensils, especially the larger ones”, said Aasia.

Water that is used for drinking is mud colored but its taste is sweet. Saline water from the wells is occasionally used; in cases of emergency or for mixing with mud, which is used for plastering houses every season. Using *khara paani* for bathing or cleansing purposes often leads to various skin diseases and causes skin damage. “It is *zeher* (poison) for us”, said Aalma Bibi. Therefore, people try to avoid using this water for personal use.

7.1.1. Economic Dependence on Water and Rain

People of Tharparkar are economically dependent upon rain. Those villagers, who own land and are dependent on agriculture for their survival, completely rely upon rains for having a good harvest. The period of four months (monsoon season) decides about the quality of crop for a farmer. In a good year, when there is more rain, people have enough crop and fodder which can be saved and year is spent without any difficulty. Surface water which accumulates after rain allows crops to thrive for few months only. The crops which are mostly cultivated include; *til* (sesame), *bajra* (millet), *moong* (green gram), and *khurar* (black lentil). There is a direct relation between availability of water and good yield. Less or no water leads to bad yield and bad yield means no food, and no fodder for animals. Agricultural activity is limited to rainy season only, and when there are no rains villagers have to switch to other jobs and sources of income generation. For instance, Saleem has a small amount of land and he also works as a transporter for carrying raw materials to the nearby cities.

Rain is everything for the local people. It is the most important source of fresh drinking water. It provides fresh water to the people of the area and is also necessary for agricultural activity. Rain water is stored by people of the village in *tankaas* and is used later for drinking and is also given to animals if it is enough in quantity. Less or no rain in the area leads to severe shortage of water and causes droughts. Lives of the people rely heavily upon the pattern of rainfalls. It is rain which decides the course of their lives and future. As one respondent explained, “the timing of rains decides about the cultivation of crops. If rainfall starts late in the season then fewer crops are cultivated and mostly only fodder is cultivated to feed the animals, as it gets very difficult to find food for the livestock during periods of drought”. The average rainfall has been declining over the last few years in Mithi district (“Household Economy and Assessment Report”, 2005). Due to this reason, those villagers who own land can only grow *bajra* (millet) and *guar* (cluster bean) for selling and to feed their animals.

7.2 Health Issues

Even the water that is available to the people of the village is not good in terms of quality. It is not clean and often gives birth to various health issues which, sometimes even prove fatal for them. The water that is used for drinking and cooking food causes different kinds of diseases, mostly stomach diseases. The most common diseases in the area include cholera, dysentery and typhoid. This makes the situation even worse for the people as there is no medical facility in ten mile radius of the area. People have to deal with seasonal and other viral diseases on their own. It is only in the case of severe illness that they go to a medical facility in a nearby city. While explaining about the unavailability of medical facilities in the village, Lal Bibi said, “we do not have any hospital near our village and we have to go to city every time. Sometimes even that is not possible, for example, when someone is too sick to travel or transport is not available, we have to manage on our own.” Apart from these diseases, the high levels of toxic elements present in the underground water of Thar region also lead to various diseases which have bad impact on human health in the long run. The drinking water available is not clean and contains mud, which makes it muddy in color.

Along with this direct effect of unclean water upon health, there are some indirect implications of water shortage as well. Lack of sufficient rainfall impacts the agriculture and livestock (two main sources of livelihood), leading to food shortage in the area. As a result, malnutrition is very common among children and women. Every year drought claims a number of lives and UNICEF has been actively working to control the situation in many parts of Thar (UNICEF, Pakistan). Along with malnutrition, poor sanitary and hygiene conditions are the other factors that lead to health issues.

While referring to severe floods that badly impacted Thar region in 2011, one respondent commented, “most of the time we encounter food shortage because of no rains and we pray for them but last time when it rained heavily in Thar, there was a flood and we were left homeless without food for several days.”

7.3 Social Events

Whenever, there is some social event in the village such as marriage, religious festival or death, people gather from other villages and areas. In the villages, customs are related to the life cycle of birth, marriage and death. There are two main Muslim religious festivals, Eid-ul-fitar and Eid-ul-azha, but in Nihaal Shah village there is another occasion of festivity. Along with these two Eids, annual fair (*melo*) is held in the village at the shrine of Pir Baja Din Aulia in the local graveyard. At the fair, mureeds of the Pir visit from far flung areas and give offerings at the shrine.

On such occasions, close and distant relatives and friends gather from different villages and the demand for water increases. According to Alma bibi, “it becomes impossible to fulfill the demand of water by fetching it on foot or on donkeys daily”. In such situations people often buy water from the city. Water tankers are brought from Naukot city and the water is stored in underground reservoirs. While recalling the incident of one of her relative’s death, Shah Bibi explained, “a lot of people were gathered in Nihaal Shah, our relatives, *mureeds* and other people of Mohammad Shah’s social circle. It was very difficult to manage water and we had to get water tanker from the city almost every day.” This way of getting water can be expensive for the residents as each water tanker costs from four to five thousand rupees. Usually a tank of water is not this expensive. In case of Nihaal Shah, since no constructed road joins the village to the city, water tank costs more to the people. Poor members of the community cannot afford to pay this much amount. Therefore, this facility is availed by well-off people mostly.

Despite all the problems and shortage, water is not a source of conflict in the area. Villagers do not fight with each other over water. Women make a queue while getting water from hand-pump and wait for their turn. People of the village also share water whenever there is some emergency or someone is in urgent need of water (events/festivities). In the words of Jumma Memon, *agar aik dosray ki madad nahi karain ge to sub mur jaen ge* (If we will not help each other, all of us would die).

However, many respondents mentioned that sometimes they are not allowed to take water from a water source (tube-well or hand-pumps) owned by people of some other village or some local landlord. Also, when asked about migrating to live near a water source, villagers responded that the people already living in the area do not allow it because it would further strain the insufficient

water source.

8. Scarcity, a Part of Culture?

A very prominent cultural aspect of water is its depiction in art and architecture. Art is deeply influenced by water imagery in many cultures. In present times and throughout the history, water has been used as a prominent feature in artistic expression. It is used in painting, architecture, literature, poetry and music; both folk and modern one. There are many songs related to rain and water in South Asian societies as well. River and its flowing water is used in artistic expression where the moving water of the river symbolizes “the movement of time and history, and thus serve as receptacles of cultural memory and identification” (Stokowski, 2008, 33).

Tharparkar is culturally very rich area of Pakistan, its culture is diverse as well as unique. Despite the hardships, culture of Thar is very colorful in terms of designs, clothing, decoration, ornaments and other craftworks. Both Hindu and Muslims share this culture and religious devotion together. In *goth* Nihaal Shah, Muslim culture is dominant because it is a Muslim village. However, in Memon Talhi, the colors of both Hindu and Muslim culture are evident.

8.1 Folksongs and Folktales

The culture of these villages is very rich; a blend of Thari customs and Muslim tradition of Sufism. Dependence of people upon environment has caused them to not just cherish nature, but has also made natural elements part of their culture in one way or another. There are many songs in Thar about water, rain and prosperity it brings to the people. One of the very famous songs sung by the native women is as follows:

O God, O God please send some rain to us
So that our houses may be full of grains

This song is about rain and the prosperity and happiness it brings for the people. According to one respondent, Shah Bibi, many folksongs are sung by the people of the Thar, especially Hindu and *bheel* women who work in the fields during monsoons.

Apart from folksongs about rain, water is also a very crucial part of folktales in Thar. Many of the famous folktales of Thar are somehow associated with water or lack of water. One such folktale was very famous in Nihaal Shah and was narrated by different respondents with slight variations in the story. The basic story was same but ending of the tale was slightly different in the two versions narrated.

According to the tale, 400 years ago, a king used to rule this area and he was searching for a suitable match for his young daughter. King's daughter Meehar was in love with a boy named Mewar who was a *manganhar* (lower cast). King imposed certain conditions on those who wanted to get married to his daughter. Conditions were difficult to meet but a wealthy king from another land came forward, who fulfilled all the conditions. Meehar got married to this man and they started journey back to their land. However, he was very fond of listening to songs and would give anything to a good singer who would sing a song for him. Knowing this fact, Mewar followed the king and asked permission to sing him a song. The king liked the song so much that he told Mewar to ask for anything he wanted and Mewar asked for the hand of his queen. The king was bound by his promise, so he gave permission to Meehar to go with Mewar and both of them left the place happily and went away from the camp. In the morning when sun came up and heat increased, Meehar became thirsty, Mewar ran in search of water but couldn't find it anywhere in the desert. Meehar was about to faint with thirst and Mewar was very worried when the caravan of the king reached close-by. Mewar ran towards him to ask for water. When the king saw him he said where your *manganharni* is? (by *manganharni* he meant Meehar). According to one version of the story, when queen heard that her status is now reduced to a lower caste from a queen, she could not bear it and died. Whereas, according to the other version, she died of thirst before Mewar could come back with water for her.

Whichever version of the tale is believed to be true, water has some role to play in the story. Whether it is the story of Mewar and Meehar, Noori Jam Tamachi¹² or any other folk story of Thar, water has a role to play in a direct or indirect manner. This folktale holds specific significance in the area as there is a *tarai* just outside the village Nihaal Shah which is named after the name of Mewar and it is known as *Mewar ji dar*.¹³

Celebration of rain is also a part of Thari culture. Rain is a source of joy for the villagers. Men, women and children enjoy rain in their own different ways. Children celebrate by playing and dancing and women and men continue their outdoor chores while getting drenched in rain. Women place different pots and utensils in their courtyards to gather rain water in them. Aalma bibi, while sharing her experience, mentioned that on a rainy day she occasionally cooks sweet vermicelli for the family.

Having discussed the central place of water in the culture of Thar, it becomes essential to highlight the way in which its unavailability impacts the communities. The colorful culture of Thar is somehow moving to the background because of disappearing rainfalls. With increasing droughts, less food and water and high food prices, communities face more issues each year. Many people are forced to migrate to the cities. This situation is having a negative impact on the culture of Thar. With worsening living conditions, dying generations and increased migration, there are less people left to cherish tradition and transfer the folk knowledge.

9. Analysis and Conclusion

This research attempted to bring an insight into the lives of people of Thar and their most important issue, that is, the issue of water. Lack of water in Thar is highlighted in news, documentaries and through many other forums. However, the value water carries in the society and the culture of people is hardly ever acknowledged. This firsthand knowledge is an attempt to highlight the value of water in everyday reality of people of the villages in Thar and the effects that its scarcity has upon local life. With changing climatic conditions and severity in climatic patterns people have to find more ways to adapt to these changes in order to survive.

In the case of Thar, it is essential to keep in mind that the lives of these people are strongly connected with their environment and the changes it undergoes. Their lives depend upon environment's natural resources which form an integral part of their existence. Water is rendered meaningful and important in many contexts in both of the villages of Tharparkar. It is a crucial part of many social and cultural processes and practices and its absence has negative effects upon life. Lack of water impacts almost every aspect of life in Thar, most important of which are the livelihood sustenance and health care, discussed in detail in this paper.

This paper has underlined the significance of water in different contexts of lives in the villages and reflects upon the manner in which its shortage impacts them, not just physically, but also in social terms. The symbolic aspect of water in Nihaal Shah and Memon Talhi is very evident in daily lives of the people as well as in different specific contexts. Water symbolizes not just life and sustenance in the society, rather it represents prosperity, joy, health, a source of illness (in case of saline or dirty water), blessing of the divine and a necessity of life and its scarcity is also ingrained in the society. People of Tharparkar always pray for a good monsoon season. Proper rainfalls do not just recharge the underground water and surface water ponds but also provide opportunity to the people to secure their subsistence for the whole year. Thus, water determines the social integrity and economic security for the people of the village. Without sufficient amount of water, people are left in a grave danger of facing miserable conditions, both economically and socially, throughout the year. Hence, water is a something that becomes more than a necessity in case of these villages of Tharparkar.

Culture of Tharparkar is in grave danger because of the worsening situation of water in the area. Yearly occurrence of droughts is causing many deaths, forcing others to migrate. Water related songs, myths and rituals in the region are on their way to disappear from the culture, similar to the river communities of Sindh, which are forced to move away because of water shortage, disturbing their life patterns (Magsi and Atif, 2012).

People of both villages demand easy access to drinkable water and source of irrigation in order to improve the quality of life. Although some welfare organizations have tried to improve the situation in the area but the efforts are not enough. A close coordination and better initiative is required on behalf of both civil society organizations and government departments in order to mend the situation. With very less being done to cater to the needs of the people of Tharparkar over the years, it is even more essential now to provide these people with accessible drinking water. This can be done either by governmental or non-governmental organizations by setting up more water purification plants for converting underground saline water in the area. In this way available water could be easily utilized by the local people for domestic use. This could prove helpful in reducing the troubles of the people living in the great desert of Thar; causing these communities to continue their existence and tradition.

Endnotes

¹ A tehsil is an administrative unit. It can be a city or town which serves as an administrative center with additional towns and villages included in it.

² Syed is a caste among Muslims which traces its origin back to Holy Prophet's (PBUH) family, and because of this, a special place is given to Syed caste in Muslim system of social stratification and they are placed up high in the hierarchy.

³ Kohli is a Hindu caste. There are many people belonging to kohli caste in Tharparkar and like *bheels*, they also belong to the lower strata of the society.

⁴ A caste among Muslims.

⁵ A village saint who died many years ago and his living descendants still hold a position of moral authority in the village.

⁶ These tanks are wide at the bottom and get narrow near the opening and opening of a *tanka* is about two to three inches above the ground so that no sand or impurity from the ground enters it. Lids of these tanks are removed at the time of rain to directly store rain water in them. In some cases a fine cloth is placed on the mouths of these *tankaas* which filters the polluting elements from the water.

⁷ *Goth* is a word of Sindhi language which means village and it is used with the name of every village in Sindh.

⁸ Muslim tradition of veiling.

⁹ *Mureed* is a term that denotes a follower. A *mureed* is a person who follows and serves a saint/*pir* and seeks spiritual guidance from him.

¹⁰ A *pir* is a sufi; a spiritual guide also known as saint in English.

¹¹ Mohammad Shah is the village elder and rightful heir of Baja Din Aulia in Nihaal Shah.

¹² It is famous Sindhi folktale of a prince Jam Tamachi falling in love with a fisherwoman Noori. According to the tale, Noori was buried in the middle of a lake after her death and this place is visited by many people daily.

¹³ *Dar* means a pond or a pool of water.

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